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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RYCKMAN, MELISSA K

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/764,102	<b>Applicant(s)</b> DOUGLAS ET AL.	
	<b>Examiner</b> MELISSA RYCKMAN	<b>Art Unit</b> 3773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 24-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/07 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,3, 4,6,7,11,14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Prestel (U.S. Patent No. 5,968,074).

Regarding claims 1 and 14, Prestel discloses a surgical clamp comprising a clamp head (13), a first (1) and second jaw (2) each mounted to the clamp head, an operative mechanism (proximal end of 9) coupled to the proximal end of at least one of the first jaw and the second jaw, and a structure connected to the operative mechanism, the actuating structure configured to move at least one of the first and second jaw (12), the jaws from a first configuration, where the first jaw and the second jaw are positioned substantially parallel to one another (Fig. 5), to a second configuration where the first

jaw and the second jaw are spaced apart a first distance and are positioned substantially parallel to one another (when open partially) and wherein the actuating structure is further configured to selectively rotate at least one of the first jaw and the second jaw relative to the other of the first jaw and the second jaw from the second configuration to a third configuration (Fig. 1) distal ends of the first jaw and the second jaw are spaced apart a distance greater than the first distance and the first jaw and the second jaw are not substantially parallel to one another (Fig. 3g, the ends of 15b are rounded, there is a space between the two jaws, this is spaced apart more than at the proximal end of the jaw which is near 15a in Fig. 3g).

Regarding claim 3, Prestel teaches the actuating structure comprises: a) first plate structure (22) attached to the proximal end of the first jaw having a first elongate slot (3) formed therein; b) a second plate structure (22), attached to the proximal end of the second jaw, having a second elongate slot (3) formed therein, the first and second slots extending substantially parallel (a portion of the slot is parallel) relationships; and c) linkage arrangement (9) having first and second guide pins (Fig. 3) extending into respectively each of the first and second elongate slots, whereby the actuating structure is configured to impart opening movement to the linkage arrangement by slidably displacing the guide pins in the slots to form the substantially parallel spacing between the first and second jaws (Fig. 1).

Regarding claim 4, Prestel teaches the first plate structure includes an angled slot portion, whereby, upon further actuation of the actuating structure the first guide pin is displaced into the angled slot (3 is angled) portion causing the linkage arrangement to

pivot the first jaw such that the first and second jaws move from the second configuration to the third configuration (Fig. 1).

Regarding Claims 6 and 16, Prestel teaches the first and second jaws open simultaneously (Fig. 1).

Regarding Claims 7 and 17, Prestel teaches the second jaw is provided by a guide pin slidably arranged in a link member of the linkage arrangement (3).

Regarding claim 10, Prestel teaches the first and second jaws are curved along the axial lengths thereof to accommodate the curvature of body vessels (portion of 1, Fig. 3).

Regarding Claims 11 and 18, Prestel teaches the operative mechanism is a cable (12).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,3-19 and 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marucci (U.S. Patent No. 6,582,451) as applied to claim 3 above, and further in view of Prestel (U.S. Patent No. 5,968,074).

Regarding claim 1 Marucci et al. discloses a surgical clamp comprising a clamp head (11), a first (12) and second jaw (12) each mounted to the clamp head, an

operative mechanism (11) coupled to the proximal end of at least one of the first jaw and the second jaw, and a structure connected to the operative mechanism, the actuating structure configured to move at least one of the first and second jaw (Fig. 1b), the jaws from a first configuration, where the first jaw and the second jaw are positioned substantially parallel to one another, to a second configuration where the first jaw and the second jaw are spaced apart a first distance (when partially open) and are positioned substantially parallel to one another.

4. Marucci does not have the jaws being angled to each other, however Prestel teaches a clamp where the slot in the plate structure of the first jaw includes an angled slot portion (22 and 23), whereby upon further actuations of the operative mechanism, the first guide pin is displaced into the angled slot portion causing the linkage arrangement to pivot the first jaw from the second position to the third position (Figs. 1 and 3).

It would have been obvious to one of ordinary skill in the art to make the slot have an angle so the clamp can be more versatile, the angle can provide a use such as scissors that do not have jaws in parallel, instead they are angled which provide a wider opening between the jaws.

Regarding claim 3 Marucci et al. discloses a clamp wherein the first and second jaws includes a plate structure at the proximal end (surface between 18a and 19c on Fig. 1a, and the surface between 18b and 19d on Fig. 1a), the plate structure having elongated slots formed therein (18a and 18b); the slots extend in parallel spaced relationships (Fig. 1b); and the operative mechanism comprises a linkage arrangement

(24a and 24b) having first (27a) and second guide pins (27b) extending into respectively each of the elongate slots (18a and 18b), whereby the actuating structure imparts opening movement to the linkage arrangement by slidably displacing the guide pins (Fig. 1g) in the slots to form the parallel spacing between the jaws.

5. Regarding claim 5 Marucci et al. discloses a clamp wherein the linkage arrangement comprise a plurality of closeable (24a, 24b, 25a, 25b) and openable parallel scissors links (Fig. 1b).

6. Regarding claim 9 Marucci et al. discloses a clamp wherein elastometric cushioning means are provided on the facing surfaces of the first and second elongated jaws (col. 15 ll. 47-50).

7. Regarding claim 10 Marucci et al. discloses a clamp wherein the first and second jaws are curved along the axial lengths thereof to accommodate the curvature of body vessels (Fig. 5b).

8. Regarding claim 11 Marucci et al. discloses a clamp wherein the actuator structure comprises a cable (14) actuatable by extending through an endoscopic or laparoscopic device (Fig. 6).

9. Regarding claim 12 Marucci et al. discloses a clamp but is silent regarding the length of the first and second jaw. It would have been obvious to one of ordinary skill in the art to make the operative length of each jaw about 65-75 mm, if this dimension would be appropriate for a specific vessel, it would be obvious to make the length of each jaw according to the different sizes of blood vessels.

10. Regarding claim 13 Marucci et al. discloses a clamp but is silent regarding the spacing of the clamp when it is open. It would have been obvious to one of ordinary skill in the art to make the spacing 10-12 mm when in the first position, as this could help to position the clamp around the blood vessel, and to make the spacing be about 40 mm when in the third position as this could help to arrange the clamp before it needs to clamp down on the blood vessel, if these dimension would be appropriate for a specific vessel, it would be obvious to make spacing according to the different sizes of blood vessels.

11. Regarding claims 14-19 Marucci et al. discloses a clamp wherein the linkage mechanism comprises a plurality of closeable and openable parallel scissors links (24a, 24b, 25a, 25b) (claim 15), a clamp wherein the first and second jaws (24a, 24b, 25a, 25b) are simultaneously openable and closeable parallel scissors links (Fig. 1b) (claim 16), a clamp wherein the opening movement of the second jaw is provided by a guide pin (27b) slidably arranged in a link member of the linkage system (Fig. 1a) (claim 17), a clamp where in the actuator comprises a cable (14) (claim 18), a clamp wherein elastomeric cushioning means are provided on the facing surfaces of the first and second elongated jaws (col. 15 ll. 47-50) (claim 19).

12. Regarding claims 14-19 Marucci et al. discloses a clamp comprising a first jaw including a first slot (18a) extending along a first plane (space between 18a and 19c), a second jaw including a second slot (18b) extending along a second plane (space between 18b and 19d), the first and second jaws each being arranged such that the first and second planes are substantially parallel to each other (Fig. 1b), a linkage



mechanism having at least a first pin (27a) for engagement in the first slot (18a) and at least a second pin (27b) for engagement in the second slot (18b), and an actuator (14) for displacing the linkage mechanism from a first position wherein the first pin (27a) and the second pin (27b) are positioned in the first (18a) and second (18b) slots in a substantially parallel configuration (Fig. 1b).

13. Marucci et al. does not have one of the first and second slots having an angled slot portion extending along a third plane at an angle to the first and second planes, and one of the first pin and the second pin is positioned within the angled portion. However Preston teaches that one of the first and second slots (22 and 23) having an angled slot portion extending along a third plane (12) at an angle to the first and second planes and one of the first pin and the second pin is positioned within the angled portion (Fig.1).

It would have been obvious to one of ordinary skill in the art to make the slot have an angle and to include a third plate thus the clamp can be more versatile with the angled slot and the clamp will be more durable with the third plate.

Regarding claim 24 Marucci et al. discloses a method of occluding a body vessel comprising a clamp head (11), a first (12) and second jaw (12) each mounted to the clamp head, an operative mechanism (11) coupled to the proximal end of at least one of the first jaw and the second jaw, and an actuating (14) structure connected to the operative mechanism for imparting a parallel opening movement to at least one of the first and second jaw (Fig. 1b) from a first position (Fig. 1g) to a second position (Fig. 1b when partially open) where the first jaw and the second jaw are spaced apart and parallel to one another, the actuating structure selectively imparting further scissors-like

opening movements to at least one of the first jaw and the second jaw from the second position to a third position (Fig. 1b when fully open) where the first jaw and the second jaw are spaced apart a distance greater than that of the second position (compare Fig. 1b to Fig. 1g); creating an opening in the patients body (col. 4 ll. 56); positioning the first jaw and the second jaw in the first position (col. 3 ll. 59-65); passing the clamp head through the opening (col. 4 ll. 56); actuating the actuating structure to cause one of the first jaw and the second jaw to move to the third position (col. 3 ll. 59-65); positioning the first jaw and the second jaw such that the blood vessel is disposed between the first jaw and the second jaw (col. 4 ll. 5); actuating the actuating structure to cause one of the first jaw and the second jaw to move to the first position to clamp the blood vessel (col. 4 ll. 6, 7). The first (12) and second jaw (12) define a plane that is parallel (plane is the space between 15a and 15b) to the first and second jaw and located therebetween when the first and second jaws are in the first (Fig. 1g) and second (Fig. 1e) position. The first and second jaws rotate (Fig. 1e and 1g) relative to the plane.

14. Regarding claim 25 Marucci et al. discloses a method of occluding a body vessel comprising: actuating the actuating structure to cause one of the first jaw and the second jaw to move to the second position prior to clamping the blood vessel (col. 4 ll. 9-11).

15. Regarding claim 26 Marucci et al. discloses a method of occluding a body vessel wherein the opening is a small opening (col. 4 ll. 1,2).

16. Regarding claim 27 Marucci et al. discloses a method of occluding a body vessel wherein the opening is an intercostal opening (col. 4 ll. 57).

17. Regarding claim 28 Marucci et al. discloses a method of occluding a body vessel wherein the clamp head is passed through a trocar positioned within the opening (col. 20 ll. 45-49, biopsy needle).

18. Regarding claims 4 and 6-8 Marucci et al. discloses the claimed invention as discussed above and further discloses a clamp wherein the first and second jaws of the pair of jaws are simultaneously openable and closeable responsive to actuation of the operative mechanism (col. 2 ll. 67 and col. 3 ll. 1) (claim 6), and a clamp wherein the opening movement of the second jaw is provided by a guide pin (27a and 27b) slidably arranged in a link member of the linkage system (claim 7). Regarding claim 4 Marucci et al. discloses the claimed invention except it does not have the slot in the plate structure of the first jaw does not include an angled slot portion, whereby upon further actuations of the operative mechanism, the first guide pin is displaced into the angled slot portion causing the linkage arrangement to pivot the first jaw into a scissors-like wider opening between the jaws. However, Prestel teaches a clamp where the slot in the plate structure of the first jaw includes an angled slot portion (22 and 23), whereby upon further actuations of the operative mechanism, the first guide pin is displaced into the angled slot portion causing the linkage arrangement to pivot the first jaw from the second position to the third position (Figs. 1 and 3).

It would have been obvious to one of ordinary skill in the art to make the slot have an angle so the clamp can be more versatile, the angle can provide a use such as scissors that do not have jaws in parallel, instead they are angled which provide a wider opening between the jaws.

19. Regarding claim 8 Marucci et al. discloses a clamp wherein the first jaw (12) including a plate structure (14 that attaches to 26) having a vertically extending slot (27, vertical only depends on how the device is held, it is not an angle with respect to other parts of the clamp) and a guide pin (27a) at the upper end of the angled linkage member being slidable within the slot (18a) whereby upon actuation of the linkage member by the actuating structure the guide pin is displaced upwardly in the slot so as to initially open the first jaw in parallel relationship with the second jaw (Fig. 1b).

Marucci et al. does not disclose a clamp with an angled linkage member pivotably attached to the proximal ends of the first and second elongate jaws, or the guide pin entering the upper angled slot portion further pivoting the second jaw in a scissors-like wider opening displacement. However Prestel teaches a clamp with an angled linkage member pivotably attached to the proximal ends of the first (1) and second elongate jaws (2);, and a guide pin (20) that enters the upper angled slot portion (22) further pivoting the second jaw in a scissors-like wider opening displacement (Fig. 1).

It would have been obvious to one of ordinary skill in the art to make the slot have an angle so the clamp can be more versatile, the angle can provide a use such as scissors that do not have jaws in parallel, instead they are angled which provide a wider opening between the jaws.

20. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marucci (U.S. Patent No. 6,582,451) and Prestel (U.S. Patent No. 5,968,074) as applied to claim 1 above, and further in view of Buckman et al. (U.S. Pub. No. 2005/0231183 A1).

21. Regarding claim 2 Marucci et al. discloses the claimed clamp wherein other of the first jaw and the second jaw is maintained in a fixed position relative to the clamp head during the opening movement between the first and second jaws (Marucci, col. 3, ll. 2,3). However, Marucci does not show the clamp with one of the first or second jaws remaining stationary when the other moves, however Buckman et al. shows the first jaw (Buckman, lower 12 in Fig. 8A) remaining stationary when the second jaw moves (upper 12, Fig. 8A).

22. This would have been obvious to one of ordinary skill in the art to have only one jaw move because this can provide more accuracy during surgery, because only one jaw is moving.

23. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marucci (U.S. Patent No. 6,582,451) and Prestel (U.S. Patent No. 5,968,074) as applied to claim 14 above, further in view of Fogarty et al. (U.S. Patent No. 6,228,104).

Regarding claim 20 Marucci et al. discloses a clamp except it does not have elastomeric cushioning means comprise replaceable resilient pads mounted on the jaws, the pads formed of a fabric or plastic material. However, Fogarty et al. teaches a surgical clamp having replaceable pad (Fig. 7) formed out of a thermoplastic (col. 5 ll. 47).

It would have been obvious to one of ordinary skill in the art to have the pads be replaceable and create the pads with plastic. Having replaceable pads would extend

the life of the clamp, it could also be used for different people. Plastic is a reasonable choice for the pad as it is biocompatible and durable.

### ***Response to Arguments***

Applicant's arguments filed 12/12/07 have been fully considered but they are not persuasive. The applicant generally argues the following:

- Marucci does not teach an angled slot

The examiner respectfully disagrees with the applicant, Marucci teaches an angled slot, as the curved slot is contains many angles. The combination of Maruccie and Presel would allow for the surgical instrument more flexibility in use, as it can accommodate different sized tissue.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA RYCKMAN whose telephone number is (571)272-9969. The examiner can normally be reached on Monday thru Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571)-272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MKR

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